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1 UNITED STATES PATENT AND TRADEMARK OFFICE

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3  
4 BEFORE THE BOARD OF PATENT APPEALS  
5 AND INTERFERENCES  
6

7  
8 *Ex parte* GORDON J. HARRIS  
9

10  
11 Appeal 2007-1516  
12 Application 09/891,020<sup>1</sup>  
13 Technology Center 2100  
14

15  
16 Decided: January 15, 2008  
17  
18

19  
20 Before LANCE LEONARD BARRY, ALLEN R. MACDONALD, and  
21 CAROLYN D. THOMAS, *Administrative Patent Judges*.

22  
23 THOMAS, C., *Administrative Patent Judge*.

24  
25 DECISION ON APPEAL

26 I. STATEMENT OF THE CASE

27 Appellant appeals under 35 U.S.C. § 134 from a final rejection  
28 of claims 1-11, 14-20, and 23-25 entered April 19, 2006. We have  
29 jurisdiction under 35 U.S.C. § 6(b).

\_\_\_\_\_  
1<sup>1</sup> Application filed June 25, 2001. The real party in interest is EMC  
2 Corporation.

1 We affirm-in-part.

2 A. INVENTION

3 Appellant invented a system, method, and computer readable medium  
4for moving network data to a storage resource, including a physical memory  
5page comprising a plurality of physical memory clusters. (Specification 2:1-  
66).

7

8 B. ILLUSTRATIVE CLAIMS

9 The appeal contains claims 1-11, 14-20, and 23-25. Claims 1, 6, and  
1014 are independent claims. As best representative of the disclosed and  
11claimed invention, claims 1, 3, 5, 19, and 23 are reproduced below:

12 1. A method comprising:

13 moving data from a network layer into a physical memory page,  
14wherein the network layer receives and transmits the data packets that are  
15odd-sized, arrive asynchronously, and contain metadata embedded with real  
16data and the physical memory page comprises a plurality of physical  
17memory clusters;

18 creating a logical page providing an aligned view of the data;

19 establishing a relationship between the logical page and the  
20physical memory page such that the logical page is associated with the  
21plurality of physical memory clusters; and

22 forwarding a list of the logical pages to a storage resource such  
23that the data referenced by the logical pages are stored subsequently into a  
24storage resource.

25

26

1        3.     The method of claim 1 further comprising:  
2                creating a plurality of logical pages based on the offset and  
3length of the data associated with a network write operation.

4

5        5.     The method of claim 1 further comprising:  
6                merging an existing physical memory cluster with a new  
7physical cluster based on the offset and length of the existing physical  
8memory cluster and based on the offset and length of the new physical  
9memory cluster.

10

11        19.    The method of claim 1 wherein the network layer uses a  
12transport control protocol/internet protocol (TCP/IP) to transmit and receive  
13the data over a computer network.

14

15        23.    The method of claim 1, wherein the data packets arrive in a  
16sequence that is different from an original sequence in which they were  
17transmitted.

18

19

### C. REFERENCES

20        The references relied upon by the Examiner in rejecting the claims on  
21appeal are as follows:

22	Vishin	US 5,860,146	Jan. 12, 1999
23	Nijhawan	US 6,374,341 B1	Apr. 16, 2002
24			(filed Sep. 2, 1998)
25	Richter	US 2003/0097481 A1	May 22, 2003
26			(filed Oct. 22, 2002)
27	Westbrook	US 6,934,760 B1	Aug. 23, 2005
28			(filed Feb. 4, 2001)
29			

10

1 Applicant Admitted Prior Art (AAPA), *see* Specification, page 1, lines  
28-12.

3

4

#### D. REJECTIONS

5 The Examiner entered a Final Rejection on April 19, 2006 with the  
6following rejections which are before us for review:

7 1. Claims 1-11, and 14-18 are rejected under 35 U.S.C. § 103(a) as  
8being unpatentable over Nijhawan in view of Vishin and further in view of  
9Applicant Admitted Prior Art (AAPA).

10 2. Claims 19 and 20 are rejected under 35 U.S.C. § 103(a) as being  
11unpatentable over Nijhawan-Vishin-AAPA, and further in view of Richter.

12 3. Claims 23-25 are rejected under 35 U.S.C. § 103(a) as being  
13unpatentable over Nijhawan-Vishin-AAPA, and further in view of  
14Westbrook.

15

16

#### II. PROSECUTION HISTORY

17 Appellant appealed from the Final Rejection and filed an Appeal Brief  
18(Br.) on September 6, 2006. The Examiner mailed an Examiner's Answer  
19(Answer) on December 4, 2006. Appellant filed a Reply Brief (Reply Br.)  
20on February 5, 2007.

21

22

#### III. ISSUE(S)

23 Whether Appellant has shown that the Examiner erred with respect to  
24the rejection under 35 U.S.C. § 103(a).

14

1 IV. PRINCIPLES OF LAW

2 Appellant has the burden on appeal to the Board to demonstrate error  
3in the Examiner's position. See *In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir.  
42006) ("On appeal to the Board, an applicant can overcome a rejection  
5[under § 103] by showing insufficient evidence of prima facie obviousness  
6or by rebutting the prima facie case with evidence of secondary indicia of  
7nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir.  
81998)).

9 "Section 103 forbids issuance of a patent when 'the differences  
10between the subject matter sought to be patented and the prior art are such  
11that the subject matter as a whole would have been obvious at the time the  
12invention was made to a person having ordinary skill in the art to which said  
13subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727,  
141734 (2007). The question of obviousness is resolved on the basis of  
15underlying factual determinations including (1) the scope and content of the  
16prior art, (2) any differences between the claimed subject matter and the  
17prior art, (3) the level of skill in the art, and (4) where in evidence, so-called  
18secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18  
19(1966). See also *KSR*, 127 S. Ct. at 1734 ("While the sequence of these  
20questions might be reordered in any particular case, the [*Graham*] factors  
21continue to define the inquiry that controls.")

22

1 V. ANALYSIS

2 *Grouping of Claims*

3 In the Brief, Appellant argues claims 1, 2, 4, 6, 7, 9, 10, 14, 15, and 17  
4as a group. In other words, for claims 2, 4, 6, 7, 9, 10, 14, 15, and 17  
5Appellant merely repeats the same argument made for claim 1. Thus, the  
6Board selects representative claim 1 to decide the appeal for this group.  
737 C.F.R. § 41.37(c)(1)(vii)(2006). Accordingly, the remaining claims in  
8this group stand or fall with claim 1.

9 Appellant separately argues claims 3, 5, 19, and 23.

10 Appellant argues claims 3, 8, and 16 as a group. For claims 8 and 16,  
11Appellant repeats the same argument made for claim 3. We will therefore  
12treat claims 8 and 16 as standing or falling with claim 3.

13 Appellant argues claims 5, 11, and 18 as a group. For claims 11 and  
1418, Appellant repeats the same argument made for claim 5. We will  
15therefore treat claims 11 and 18 as standing or falling with claim 5.

16 Appellant argues claims 19 and 20 as a group. For claim 20,  
17Appellant repeats the same argument made for claim 19. We will therefore  
18treat claim 20 as standing or falling with claim 19.

19 Appellant argues claims 23-25 as a group. For claims 24 and 25,  
20Appellant repeats the same argument made for claim 23. We will therefore  
21treat claims 24 and 25 as standing or falling with claim 23.

22 *See also In re Young*, 927 F.2d 588, 590 (Fed. Cir. 1991).

23

22

1 *Claims 1, 2, 4, 6, 7, 9, 10, 14, 15, and 17*

2 Appellant contends that “Vishin’s network 114 is not understood to be  
3a network layer or to have a network layer.” (Br. 10-11.)

4 Vishin’s Fig. 9 discloses at element 114 a network interconnectivity  
5including switches. The Examiner contends that “one of ordinary skill in the  
6art would appreciate that in networks, network switches operate at the data  
7link layer (layer 2) and sometimes at the network layer (layer 3) to filter and  
8forward data packets between network segments, . . . it should include the  
9step of moving data from a network layer into memory stores . . .” (Answer  
106 and 12). We agree.

11 The Examiner supports this contention by offering a word definition  
12of the word “switch” from the Webopedia Computer Dictionary,  
13<http://www.webopedia.com/TERMS/s/switch.html>. (See Answer 12.)  
14Appellant argues that “the Webopedia reference is a newly cited reference  
15that was never introduced during the prior prosecution.” (Reply Br. 2.) We  
16disagree.

17 Instead, we find that the Examiner’s Webopedia definition is merely  
18introduced to illustrate that a network layer could be inherent to Vishin  
19network 114 when a switch is included therein.

20 Claims are given their broadest reasonable construction “in light of  
21the specification as it would be interpreted by one of ordinary skill in the  
22art.” *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d at 1364 (Fed. Cir. 2004).  
23The Board is required to use a different standard for construing claims than



1that used by district courts. We have held that it is error for the Board to  
2“appl[y] the mode of claim interpretation that is used by courts in litigation,  
3when interpreting the claims of issued patents in connection with  
4determinations of infringement and validity.” *In re Zletz*, 893 F.2d 319, 321  
5(Fed. Cir. 1989); accord *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997)  
6(“It would be inconsistent with the role assigned to the PTO in issuing a  
7patent to require it to interpret claims in the same manner as judges who,  
8post-issuance, operate under the assumption the patent is valid.”). Instead,  
9as we explained above, the PTO is obligated to give claims their broadest  
10reasonable interpretation during examination. *In re Am. Acad. of Sci. Tech.*  
11*Ctr.*, 367 F.3d 1359, 1369 (Fed. Cir. 2004).

12 In the instant case, Appellant has not provided a lexicographic  
13definition for the term “network layer”. As such, “network layer” could  
14mean any layer in a network component. The Examiner has shown that  
15Vishin discloses a “switch” in Fig. 9, which can be construed as being in the  
16network layer or the data link layer. Thus, we find the Examiner has  
17provided an adequate reason why an artisan would have construed Vishin’s  
18network 114 as including a network layer.

19 Appellant further contends that “Vishin’s description of the  
20network 114 does not contain features that would suggest that the network  
21114 uses a network layer. Such features could include, for example, the  
22routing of data packets . . . .” (Br. 11.)

1 Vishin discloses that “if most of a large file is stored at a first location  
2 in the system 100, but a segment of the file has been moved to a particular  
3 cluster 102 for updating, a first RPTE would be used to indicate the position  
4 of the entire file at the first location, and a second RPTE stored at a lower  
5 index position in the same group as the first RPTE would be used to indicate  
6 the position of the file segment that has been moved.” (Vishin, col. 6, ll. 39-  
7 746.) In other words, Vishin discloses moving a *segment* of a data file if  
8 necessary. We find that the term “moving a segment of data” suggests the  
9 transmitting and receiving of data packets.

10 Therefore, we find that Vishin’s network 114 would have suggested  
11 the use of a network layer having a switch and the transmitting and receiving  
12 of data packets.

13 Appellant also contends that “[t]here is nothing in Vishin that suggests  
14 that network 114 is anything more than a simple connection between  
15 processor clusters, which could, for example, be implemented by serial  
16 connection that sends data one bit at a time, not as packets. Thus, neither  
17 Nijhawan nor Vishin provide any suggestion as to why one skilled in the art  
18 would be motivated to modify their systems with AAPA to transmit and  
19 receive data packets, and in particular, to transmit and receive data packets  
20 that are odd-sized, arrive asynchronously, and contain metadata embedded  
21 with real data.” (Br. 13.)

22 For at least the reasons noted above, we do not find Appellant’s  
23 argument persuasive. As noted *supra*, we find that Vishin suggests the





1Appellant further contends that “[a]lthough, claim 5 does not literally recite  
2combining the new and existing physical memory clusters, the feature of  
3‘merging of an existing physical memory cluster with a new physical  
4memory’ inherently requires that the new and existing physical memory  
5clusters be combined.” (Reply Br. 10.) We Agree.

6 The ordinary and usual meaning of “merging” is to cause to combine,  
7unite, or coalesce. *Merriam-Webster’s Collegiate Dictionary*, p. 777 (11<sup>th</sup>  
8Edition 2005). The Examiner proffered teachings in Nijhawan merely  
9disclose allocating memory, which denotes setting aside or apart for a  
10specified purpose. Absent a teaching or suggestion of a merging of existing  
11memory cluster with new memory cluster, we are unpersuaded of a case of  
12obviousness. Therefore, we reverse the rejection of claims 5, 11, and 18.

13

14 *Claims 19 and 20*

15 Appellant contends that “neither Nijhawan nor Vishin disclose or  
16suggest anything that would motivate a person of ordinary skill in the art to  
17modify their systems to transmit data over a network as data packets, a  
18feature required by AAPA and Richter. Therefore, to combine Nijhawan,  
19Vishin, AAPA, and Richter in the manner suggested by the Examiner, a  
20person of ordinary skill in the art would need to rely upon the Appellant’s  
21invention as a roadmap.” (Br. 17.) We disagree.

22 As noted *supra*, Vishin has been found to disclose the transmission of  
23data packets. As such, we find that the Appellant has failed to show error in

1the Examiner's rejection. Therefore, we affirm the rejection of claim 19 and  
2of claim 20, which fall therewith.

3

4

#### *Claims 23-25*

5 Appellant contends that "[t]he Examiner's proposed combination of  
6Nijhawan, Vishin, AAPA, and Westbrook amounts to a hindsight  
7combination, which as discussed above, is improper as a matter of law."  
8(Br. 18.) Appellant further contends that "[b]oth AAPA and Westbrook  
9require networks that transmit data as data packets; however, neither  
10Nijhawan nor Vishin disclose or suggest anything that would motivate a  
11person of ordinary skill in the art to modify their systems to transmit data  
12over a network as data packets." (Reply Br. 14.) We disagree for the same  
13reasons noted *supra* regarding Vishin's disclosure of data packets.

14 We find that the Appellant has failed to show error in the Examiner's  
15rejection. Therefore, we affirm the rejection of claim 23 and of claims 24  
16and 25, which fall therewith.

17

18

#### VI. CONCLUSIONS

19 We conclude that Appellant has not shown that the Examiner erred in  
20rejecting claims 1-4, 6-10, 14-17, 19, 20, and 23-25.

21 Thus, claims 1-4, 6-10, 14-17, 19, 20, and 23-25 are not patentable.

1 We conclude that Appellant has shown that the Examiner erred in  
2rejecting claims 5, 11, and 18. Thus, the record before us does not show  
3claims 5, 11, and 18 to be unpatentable.

4

5 VII. DECISION

6 In view of the foregoing discussion, we affirm the Examiner's  
7rejection of claims 1-4, 6-10, 14-17, 19, 20, and 23-25, and reverse the  
8Examiner's rejection of claims 5, 11, and 18.

9 No time period for taking any subsequent action in connection with  
10this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R.  
11§ 1.136(a)(1)(iv) (2006).

12

13 AFFIRMED-IN-PART

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19rwk

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